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APPROVAL OF UNDP ASSISTANCE TO A PROJECT OF BANGLADESH

IPF: (1987-91) $135 668 000
(BGD/90/C01) - Grameen Deep Tubewells

Date of approval by the AC: 1/	24 July 1991
Expected duration:	Five years
Proposed executive agency:	Government
Government implementing agency:	Grameen Agricultural Foundation (Ministry of Finance)
Proposed UNCDF contribution:	$6 507 000 Source of funds: General Resources
Trust Fund Financing:	$7 336 000 Source of funds: Dutch Government

Project background

Though Bangladesh is endowed with abundant groundwater resources and quite fertile land, food grains still comprise nearly 1/4 of the country's total imports. Given the country's high population density and severe land pressures, the Government and donor community have invested heavily in irrigated agriculture in order to create an additional winter cropping season (and hence a potential breakthrough in national food production). Since the 1960s deep tubwells (DTWs) have been one of the principal technologies chosen for irrigation development; and approximately 28,000 deep tubewell units have been installed throughout the country.

However, most of these wells are operating at typically half their capacity; and many have fallen into disrepair. One of the most important constraints to their efficient utilization has been that the typical command area of one DTW involves landowners (of varying sizes) and share croppers or lease-in farmers (30 percent). This alone poses considerable organizational and co-ordination problems for the irrigating group, given the inherent conflicts between farmers over water rights, and the inequities in land ownership and power in rural Bangladesh.

These problems have been exacerbated by the Government's policy of distributing the DTWs at a fraction of their cost and a national banking system that rarely covers loans. As a result, little attention has been paid to financial or managerial sustainability of the DTWs, and the majority of wells have come under the control of the most powerful farmers who have tended to irrigate only their own property.

Recently however, the Government has moved to privatize the irrigation sector and has begun selling off most of its DTW assets. Grameen Bank, along with other development-oriented organizations such as BRAC and Proshika, have recently assumed ownership and management of a number of DTWs already installed in northwest Bangladesh under previous donor financing. Since 1989 Grameen Bank has been operating close to 650 such wells.

1/ This Fact Sheet reflects the status of the project/revision at the tine it was approved by the Action Committee; modifications to the project/revision have occurred subsequently.

Grameen Bank has established a separate entity - the Grameen Agricultural Foundation (GAF), to take over a total of 1,150 DTWs in the Rnagpur Dinajpur area, for which they have requested UNCDF assistance. GAF will run the DTWs as financially self-sustaining enterprises, incorporating the principles of cost recovery, efficiency, decentralization and equitable access that have characterized Grameen's successful rural banking operations.

Description of project

The proposed project will provide resources to support GAF's DTW activities in the Rangpur/Dinajpur area, allowing an expansion from the present level of approximately 650 DTWs to a total of 1,150 DTWs by project end (5 years). The immediate objectives are to: (a) establish an efficient, commercially viable entity; (b) manage DTW assets; and (c) provide water and agricultural inputs to local farmers in return for a crop share.

Approximately 90,000 farmers will receive water, seeds and fertilizers from GAF for which they will pay a share of their crops (25 to 40) percent. This will allow the given DTW enterprise to become financially viable over time. Through regular access to irrigation and agricultural inputs (including HYV seeds and fertilizers) and the adoption of improved water management and cropping practices, it is projected that the net incomes per acre of participating farmers will double by project year six. The employment impact from increased agricultural production is estimated to be 3 million workdays annually, two-thirds of which would be hired (landless) labor. Because the initial investment costs of the 1,159 DTWs have already been incurred, an economic internal rate of return (EIRR) of 54 percent is projected. The financial break-even point for the project is year 4.

Once the DTWs prove profitable, landless groups in the project area will be provided the opportunity to own and operate individual or groups of the most viable DTW assets in joint venture partnership with GAF.

The project has multiple long-term goals which will include: (1) increasing Bangladesh's agricultural production by maximizing the productive potential of sunk DTW investments; (2) increasing rural incomes and agriculture-related employment; (3) development through GAF of an improved DTW management model, based on principles of cost recovery and a more efficient and equitable use of irrigation assets.

Inputs

UNCDF (in joint-funding arrangements with the Dutch Government) will provide funds for the working capital, management infrastructure and technical support needed for Grameen Agricultural Foundation to operate the existing stock of 650 DTWs and takeover an additional 500 wells over the next five years. The Government of Bangladesh will contribute (US) $7,000 000 from USPL480 counterpart funds.

Financial data

	UNCDF $	Dutch Trust Fund $
Missions	106 000	120 000
Subcontracts	2 031 000	2 289 000
Equipment	998 000	1 125 000
Miscellaneous	2 726 000	3 074 000
Contingencies	470 000	530 000
UNCDF Support Cost	176 000	198 000
Total	6 507 000	7 336 000

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